

What is claimed is;

1. An electronic engine control system comprising a controller having an ignition control section to control an ignition of an internal combustion engine and a fuel injection control section to control an injector of a fuel injection unit to supply fuel to said engine, and an electric power source section to supply a driving power from a generator driven by said engine to said fuel injection unit and said controller; said fuel injection control section comprising an injection amount decision section to decide a fuel injection amount, an injection command generation section to generate an injection command and an injector drive part to drive said injector in response to said injection command to inject said fuel from said injector; said injection command generation section being so constructed as to generate a first injection command when an output voltage of said generator reaches a set value after the start operation of the engine begins.
- 15 2. An electronic engine control system comprising a controller having an ignition control section to control an ignition of an internal combustion engine and a fuel injection control section to control an injector of a fuel injection unit to supply fuel to said engine, and an electric power source section to supply a driving power from a generator driven by said engine to said fuel injection unit and said controller; said fuel injection control section comprising an injection amount decision section to decide a fuel injection amount, an injection command generation section to generate an injection command and an injector drive part to drive said injector in response to said injection command to inject said fuel from said injector; said injection amount decision section comprising a first injection amount decision part to decide a first injection amount on the start of said engine in accordance with a cranking speed of said engine; and said injection command generation section being so constructed as to generate a first injection command when an output

voltage of said generator reaches a set value after the start operation of the engine begins.

3. An electronic engine control system as set forth in claim 2 and wherein said first injection amount decision part decides said first fuel injection amount by correcting said predetermined first fuel injection amount on the start of said engine in accordance with said cranking speed of said engine.

4. An electronic engine control system as set forth in claim 2 and wherein said injection amount decision section further comprises a cranking speed speculation part to speculate said cranking speed from an increase rate of said output voltage of said generator, said first injection amount decision part being so constructed as to decide said first fuel injection amount using said cranking speed speculated by said cranking speed speculation part.

5. An electronic engine control system as set forth in claim 2 and wherein said generator has a phase winding to output an AC signal having a phase reversed every rotation of a crankshaft of said engine for a predetermined angle and wherein said injection amount decision section further comprises a cranking speed speculation part to speculate said cranking speed from a rotational speed information of said crankshaft included in an output signal of said engine, said first injection amount decision part being so constructed as to decide said first fuel injection amount using said cranking speed speculated by said cranking speed speculation part.

6. An electronic engine control system as set forth in claim 2 and wherein said ignition control section comprises ignition prohibition means to prohibit an ignition of said engine until at least one fuel injection is made on the start of said engine.

7. An electronic engine control system comprising a controller having

an ignition control section to control an ignition of an internal combustion engine and a fuel injection control section to control an injector of a fuel injection unit to supply fuel to said engine, and an electric power source section to supply a driving power from a generator driven by said engine to
5 said fuel injection unit and said controller; said fuel injection control section comprising an injection amount decision section to decide a fuel injection amount injected from said injector, an injection command generation section to generate an injection command and an injector drive part to drive said injector in response to said injection command to inject said fuel from said
10 injector, said injector amount decision section comprising a first injection amount decision part to decide a first injection amount in the form of a fuel injection time on the start of said engine in accordance with a cranking speed of said engine, and said injection command generation section being so constructed as to generate a first injection command when an output voltage
15 of said generator reaches a set value after a cranking operation of said engine begins.

8. An electronic engine control system as set forth in claim 7 and wherein said first injection amount decision part decides said fuel injection time for applying said first fuel injection amount by correcting a
20 predetermined first fuel injection time on the start of said engine in accordance with said cranking speed of said engine.

9. An electronic engine control system as set forth in claim 7 and wherein said injection amount decision section further comprises a cranking speed speculation part to speculate said cranking speed from an increase rate
25 of said output voltage of said generator, and said first injection amount decision part being so constructed as to decide said first fuel injection time using said cranking speed speculated by said cranking speed speculation part.

10. An electronic engine control system as set forth in claim 7 and
wherein said generator has a phase winding to output an AC signal having a
phase reversed every rotation of a crankshaft of said engine for a
predetermined angle and wherein said injection amount decision section
5 further comprises a cranking speed speculation part to speculate said
cranking speed from a rotational speed information of said crankshaft
included in an output signal of said engine and said first injection amount
decision part being so constructed as to decide said first fuel injection time
using said cranking speed speculated by said cranking speed speculation
10 part.

11. An electronic engine control system as set forth in claim 7 and
wherein said ignition control section comprises ignition prohibition means to
prohibit an ignition of said engine until at least one fuel injection is made on
the start of said engine.

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